Proposed Synopsis for Ph.D. Pre-registration seminar

On

Effectiveness of Acceptance and Commitment Therapy (ACT) as a Psychotherapeutic Intervention among Cancer Patients in Jharkhand

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1.0 Introduction

1.1 State of the Art

Cancer is a life-altering disease that impacts individuals on multiple levels. Physically, it can cause pain, fatigue, and significant health deterioration, often requiring invasive treatments like chemotherapy or surgery. Emotionally, it creates fear, anxiety and feelings of vulnerability, profoundly affecting mental health. Socially, cancer can strain relationships alter family dynamics and lead to feelings of isolation. Financially, the cost of treatment can be overwhelming, adding stress to an already challenging situation. Despite its challenges many find strength through support systems, resilience, and advancements in treatment. Coping with cancer requires a holistic approach, addressing physical, emotional, and social well-being.

1.2 Conceptual framework

1.2.1 Cancer

Cancer remains a significant global health challenge, with increasing incidence rates and substantial mortality worldwide. In 2024, an estimated 20 million new cancer cases were diagnosed globally, with projections suggesting this number could rise to 35 million by 2050 (American Cancer Society, 2024). The metastasis or return of primary cancer results in advanced cancer, a condition that is incurable and potentially fatal (American Cancer Society, 2016). According to Dong et al. (2016), patients with advanced cancer are continuously reminded of their approaching mortality due to ongoing chemotherapy and radiation treatment, uncontrolled symptoms, and prolonged hospital stays. Additionally, the development of advanced disease varies with a negative prognosis when compared to early-stage illness. They often have poor health outcomes (Henson et al., 2018; So et al., 2019) in addition to mounting financial burden from significant health care resource usage and readmission (Nipp et al., 2017).

Anxiety, despair, and psychological discomfort are among the many bad experiences that 20% to 65% of people with advanced cancer have at the end of their lives. This is primarily due to their inability to accept their diagnosis (Bail et al., 2018), fear of dying and burdening others (Lehto and Stein, 2009), propensity to become caught up in a never-ending cycle of symptom-solving

(Kato, 2016), and even loss of life's purpose and values (la Cour and Hvidt, 2010). Avoidant behaviours including self-isolation, a reluctance to ask for assistance, an unwillingness to engage in social or physical activities, and a rejection of medical treatments are often brought on by these events (González-Fernández et al., 2018). However, these avoidant practices reduce their quality of life in regard to their health, degrade the benefits of therapy, impair physical function, and restrict their access to supporting connections (Lo et al., 2013). Additionally, patients suffer from physical symptoms such weakness, discomfort, exhaustion, and loss of vitality (Teunissen et al., 2007). Physical and psychological symptoms often have a two-way effect (Reiche et al., 2004). As a result, they hinder normal functioning (Vowles et al., 2007) and have an impact on health-related quality of life (Smyth et al., 2016). Interventions to improve health-related outcomes in this population are required because patients with advanced cancer may face dual challenges due to the coexistence of physical and psychological symptoms (Domino et al., 2014; Löwe et al., 2008; Merikangas et al., 2007).

1.2.2 Acceptance and commitment therapy

Acceptance and Commitment Therapy (ACT) has emerged as a promising psychological intervention for individuals affected by cancer. Metaphors, mindfulness, experiential exercises, and value-guided behavioural treatments are all included into Acceptance and Commitment Therapy, a mindfulness-based behavioural therapy for health (Hayes and Wilson, 1994). According to six fundamental psychological processes, the main goals of acceptance and commitment therapy (also known as psychological flexibility) (Hayes, 2004) are to assist patients in accepting unpleasant experiences, helping them reach worthwhile goals, and, as a byproduct, reducing their symptoms. These processes include: self as context (adopting "a sense of self" as a locus of perspective that provides a transcendent and spiritual side to normal verbal humans), values (providing a framework for goal setting), committed actions (persisting or altering value-based behaviour), acceptance (opening up and making room for distressing thoughts, emotions, or experiences), cognitive defusion (separating and changing the functions of distressing thoughts, emotions, or experiences rather than the content), and being present (consciously and nonjudgmentally connecting with what is happening in that moment) (Hayes et al., 2006; Hofmann and Asmundson, 2008). A possible mechanism behind the correlation between psychological and physical symptoms may be psychological inflexibility, which has

been linked to psychological symptoms and quality of life in cancer patients (S. L. Brown et al., 2020; González-Fernández et al., 2017). Increased acceptance is associated with decreased psychological suffering and facilitates engagement with life despite limitations imposed by illness. Whilst ACT may be beneficial for a range of psychological disorders, studies in life threatening illnesses are limited; only one trial has been identified for people with advanced (ovarian) cancer, which suggested that ACT, compared with cognitive behavioural therapy (CBT) type intervention, was associated with improved quality of life (QoL) and decreased psychological distress (Serfaty et al., 2018).
Patients with advanced cancer suffer more distress than those in the early stages due to a variety of factors, including an inability to cure the disease, poor physical conditions, fatigue from ongoing treatments, uncontrollable drug side effects, and a sense of worthlessness and hopelessness as the cancer progresses (Hayes, 2005). As a result, they are more likely to become entangled in stressful and frustrating situations. Patients may feel overburdened to cope with the physical demands of treatments and cannot seriously reflect on their goals and values (Hulbert-Williams et al., 2015), neglecting what really matters to them and thereby straying from value-based living. Putting psychological flexibility into the context of the illness trajectory of advanced cancer, Acceptance and Commitment Therapy may provide patients with opportunities to non-judgmentally accept whatever experiences arising from the trajectory and engage in behaviours in line with their values, thereby leading to great improvements in cancer-related health outcomes and better quality of life (Gentili et al., 2019; Greco et al., 2008). As such, ACT appears to be compatible with the psychological needs of cancer patients.

Review Of Literature

Gillanders et al., (2015) speaks on the theory driven approach of application of Acceptance and Commitment therapy for patients detected with Cancer. Through its application promotes forms of coping that predict positive psychosocial outcomes among cancer survivors such as that of actively accepting cancer-related distress, reducing cancer-related avoidance, clarifying personal values, and committing to meaningful behavior change. Thus, it helps them to live life meaningfully despite the chances of odds being quite high.The paper highlighted the adaptation of ACT as a model for cancer survivors. With the multiple baselines check it was due in the

conclusion that reduction in psychological symptoms such as that of Anxiety and psychological flexibility was improved due to the impact of Intervention rather than passing of time. This was held in caution as the sample size was small with unequivocal gender distribution. Therefore, further researches are needed to affirm the efficacy of ACT on an equivocal gender distributed sample size.

Jiang et al., (2024) Cancer patients often experience significant psychological distress, including anxiety, depression, and stress, which can negatively affect their quality of life and treatment outcomes. Traditional cognitive-behavioral therapies (CBTs) have been used to address these challenges but may have limitations in fully addressing the complex emotional needs of cancer patients. Acceptance and Commitment Therapy (ACT), a third-wave CBT, has emerged as a promising alternative. It does not aim to reduce symptoms directly but instead helps individuals build resilience and pursue meaningful life goals despite adversity.Several randomized controlled trials (RCTs) have demonstrated the efficacy of ACT in reducing psychological distress among cancer patients. Studies consistently report improvements in anxiety, depression, and psychological flexibility following ACT interventions. Meta-analyses reveal that ACT significantly outperforms treatment-as-usual (TAU) and wait-list controls in alleviating psychological distress. However, when compared to active control groups (e.g., standard education or other forms of CBT), the results are less definitive. Despite these promising findings, the literature highlights limitations, such as variability in study methodologies, differences in cancer types, and inconsistencies in the delivery of ACT interventions. These factors necessitate further high-quality research to establish the reliability and generalizability of ACT's benefits for cancer patients. However, additional research is needed to refine its implementation and confirm its superiority over other psychological therapies in oncology care.

Hulbert-Williams et al., (2014) in “interventions for patients with cancer: psychological flexibility and the potential utility of Acceptance and Commitment Therapy”. Cancer is an illness affecting patients' physical and psychosocial well-being: high numbers report problematic levels of distress at many points through diagnosis, treatment, and survivorship. Conclusive evidence for the long-term benefits of psychological interventions is lacking. Acceptance and Commitment Therapy (ACT) may add components not emphasised elsewhere and provides a more suitable model of adjustment and coping for Oncology specific research. Only a handful of

them have purposively applied ACT with the cancer setting, the current research demonstrates potential clinical- and cost-effectiveness for a range of patients, including those with psychological comorbidity. ACT provides an intervention paradigm to suitably expand on the solid scientific foundation for mindfulness in this patient group within the broader context of cancer adjustment. According to the current data, the ACT framework provides an intervention approach that could be more adapted to the personal character of cancer adjustment. This bolsters the point for further research in this area.

Mosher et al., (2021) "Symptom experiences in advanced cancer: Relationships to acceptance and commitment therapy constructs"**.** The researcher investigated the relationships between symptom-based subgroups of patients with advanced cancer and acceptance and commitment therapy (ACT) components. Five common symptoms and ACT variables (i.e., psychological inflexibility, cognitive fusion, values obstruction and progress, peaceful acceptance, mindfulness, and activity engagement) were evaluated once by patients suffering from types of cancer. Three patient classes were identified by latent profile analysis: (1) normal levels of all symptoms (32%); (2) normal levels of all symptoms with the exception of moderate fatigue and mild sleep problems (19%); and (3) normal pain, mild sleep problems, anxiety, and depressive symptoms, along with moderate fatigue (48%). When demographic factors were considered, a larger probability of belonging to classes 1 or 2 than class 3 was linked to reduced psychological inflexibility, cognitive fusion, and values blockage. Additionally, a larger probability of belonging to class 1 as opposed to class 3 was linked to stronger values advancement, calm acceptance, mindfulness, and activity involvement. The only two of these four characteristics that were linked to a higher chance of being in class 2 as opposed to class 3 were increased mindfulness and exercise involvement. Overall it reflects that patients with advanced cancer exhibit a variety of symptom profiles, and even mild to moderate symptom levels are associated with a higher degree of disengagement from activities that have personal significance and a lower level of acceptance of the disease and internal experiences (e.g., symptoms, thoughts, emotions). Results suggest further testing of ACT to treat symptom interference with functioning in patients with advanced cancer and are in line with the ACT concept.

Li et al., (2021) "Effects of Acceptance and Commitment Therapy on health-related outcomes for patients with advanced cancer: A systematic review" The objective was identifying the primary

content, mode of delivery, dosage, and duration of Acceptance and Commitment Therapy as well as methodically summarising the evidence supporting its use in patients with advanced cancer to enhance their physical and psychological outcomes and health-related quality of life were the goals of this review. This review comprised six studies with 261 people, including one with a pretest-posttest design and five randomised control trials. When compared to normal treatment, Acceptance and Commitment Therapy substantially decreased psychological distress and depression symptoms after the session, according to two of the five trials. According to one research, there were notable and substantial changes in anxiety, sleep patterns, and health-related quality of life after the intervention. Changes in pain and weariness were not statistically significant. Adherence rates were high for intervention programs that lasted little longer than four sessions. The findings are conclusive of saying that the individuals with advanced cancer may benefit from acceptance and commitment therapy to enhance their sleep patterns, psychological discomfort, anxiety, depressive symptoms, and overall health-related quality of life. The evidence is, however, undermined by a lack of research, a small sample size, and methodological variability. To establish the efficacy and assess its long-term impact on this group, more thorough studies using short Acceptance and Commitment Therapy programs should be carried out with bigger samples.

Zhang et al., (2023) the researcher sought to determine the effects of ACT on cancer patients' psychological flexibility, tiredness, sleep disruption, and quality of life while also investigating modifiers. From the beginning until September 29, 2022, the electronic databases PubMed, Embase, Web of Science, CENTRAL, PsycINFO, CINAHL, CNKI, VIP, and Wanfang were searched. Evidence certainty was assessed using the Grading of Recommendations Assessment, Development, and Evaluation process and the risk-of-bias assessment tool II developed by the Cochrane Collaboration. R Studio was used to analyse the data. 19 relevant studies (1643 patients) published between 2012 and 2022 were considered in the analysis. The combined findings demonstrated that ACT significantly enhanced psychological flexibility (mean difference [MD] = -4.22, 95% CI [-7.86, -0.58], p =.02) and quality of life (Hedges' g = 0.94, 95% CI [0.59, 1.29], Z = 5.31, p <.01), but not fatigue (Hedges' g = -0.03, 95% CI [-0.24, 0.18], p =.75) or sleep disturbance (Hedges' g = -0.26, 95% CI [-0.82, 0.30], p =.37) in cancer patients. Moderation analysis revealed that the effects of ACT on psychological flexibility and sleep disturbance were moderated by age (β = 0.15, p =.04) and intervention duration (β = -1.39, p

<.01), respectively. Additional analyses showed a 3-month sustainable effect on psychological flexibility (MD = -4.36, 95% CI [-8.67, -0.05], p <.05). Although there is little data on acceptance and commitment therapy's impact on tiredness and sleep disruption, it is helpful for improving psychological flexibility and cancer patients' quality of life. To have better outcomes in clinical practice, ACT should be more thoroughly planned and rounded.

Maunick et al., (2023) “Effects of acceptance and commitment therapy on fatigue for patients with cancer and other chronic health conditions: A systematic review and meta-analysis” states that compared to healthy people, chronically sick people experience fatigue far more often. One of the most prevalent and incapacitating symptoms among people with long-term medical issues is fatigue. Despite this, little research has been done on the effectiveness of psychological treatments for reducing tiredness; much of it has been on cognitive behavioural therapy. This systematic review and meta-analysis sought to ascertain if Acceptance and Commitment Therapy (ACT) is effective in lowering tiredness in individuals with chronic health problems, given that ACT has been shown to be effective in improving other outcomes for this group. To find pertinent studies, a thorough search was done in MEDLINE, EMBASE, CINAHL, PsycINFO, the Cochrane Library, the US National Library of Medicine Clinical Trial Register, and the reference lists of pertinent publications. According to the inclusion criteria, the research had to be a randomised controlled trial that evaluated tiredness in individuals with a chronic illness and used an ACT-predominant intervention. The inverse-variance random effects model with constrained maximum likelihood estimation was used to pool the data and provide the standardised mean difference between the experimental and control groups after the intervention. Eight RCTs were included in the present systematic review and meta-analysis. After receiving ACT sessions, participants with chronic conditions (such as cancer and fibromyalgia) showed decreased weariness, suggesting a minor benefit (SMD = -0.16, 95% CI [-0.30, -0.01], p = 0.03). Thus stated that ACT has the potential to lessen tiredness, even if the research is restricted to fibromyalgia and cancer. To expand on these results, future studies should look into ACT for tiredness in patients with additional chronic illnesses.

Zhao et al., (2020) was carried out in order to quantify the impact of Acceptance and Commitment Therapy (ACT) on the psychological and physical suffering of cancer patients and to find relevant moderators in this body of research, the present study used meta-analysis and

trial sequential analysis. In February 2020, 25 independent studies (17 randomised controlled trials, 8 non-randomized controlled trials; 2256 individuals) on the effects of ACT among cancer patients were found by a search of many databases. To find out whether there is enough data to make firm judgements, trial sequential analysis, or TSA, was used. Findings indicated that ACT enhanced psychological flexibility (g = 0.58), quality of life (g = 1.19), and hope (g = 2.17), while also substantially lowering psychological distress (g = 0.88) in cancer patients. TSA demonstrated that there was enough data to provide reliable estimations of how ACT affected psychological distress and life quality. Studies in eastern nations, with younger populations, and with longer treatment durations showed bigger effect sizes for psychological discomfort which draws the inference that ACT is an effective intervention in therapeutic settings. It is recommended that future research consider the stage and course of cancer.

González-Fernández and Fernández-Rodríguez (2018) with a purpose to examine published research on the effectiveness of acceptance and commitment therapy in the care of cancer patients. The Web of Science, Google Scholar, and Dialnet were used to do a systematic review of the literature (2000-2016). Nineteen articles met the requirements for inclusion. Patients who underwent Acceptance and Commitment Therapy-based therapies had improved emotional well-being, a higher quality of life, and more psychological adaptability. The psychological treatment of cancer patients has shown promise with acceptance and commitment therapy. However, additional research is required to determine what patient and/or intervention characteristics might improve results due to the heterogeneity and limitations of the studies, primarily with regard to sample characteristics, study design, and the way mechanisms responsible for changes are evaluated. Particularly interesting would be randomised controlled studies that compare the effectiveness of Acceptance and Commitment Therapy with no therapy, with treatment with a placebo, and with other effective treatments. These trials should also examine the medium- and long-term outcomes.

2.0 Problem to be investigated

Problem which has been taken for investigation is to observe the effectiveness of acceptance and commitment therapy as a psychological intervention among cancer patients in Jharkhand". A

comparison will be conducted between male and female cancer patients in the district of Ranchi and their response to the intervention.

3.0 Objectives of the investigation and motivation

The following objectives have been formulated for the present study:

1. To examine the effectiveness of ACT on perceived stress among male and female cancer patients.
2. To examine the effectiveness of ACT on Quality of life among male and female cancer patients.
3. To examine the effectiveness of ACT on coping skills among male and female cancer patients.

3.1 Motivation of the research

Acceptance and Commitment Therapy is a transdiagnostic mindfulness-based approach used to reduce symptom interference. ACT combines mindfulness and behavioural change strategies to help individual develop psychological flexibility. It is based on the principle that instead of fighting or avoiding painful thoughts, feelings and experience, individuals can learn to accept them while committing to actions aligned with their values. A full-fledged study on cancer patients has lesser amount of trace in Indian literature as well as worldwide. Therefore, a study based on the account of ACT as an intervention mapping the quality of life, perceived stress, and coping skills of Cancer patients is required to effectively map out the intervention strategy for people in terminal Illness. Our study is based on previous work, which found an association between acceptance, psychological, and physical function in hospice day-therapy attendees (i.e., those receiving palliative care); this work supported the rationale for an ACT based intervention for improving outcomes for those with palliative care needs. Prior studies raise concern about gender bias in cancer research, including insufficient inclusion of women or men, or studying women and men differently. The 1993 National Institutes of Health Revitalization Act aimed to eliminate gender bias in medicine.

4.0 Research Hypothesis

The following hypotheses have been formulated for the present study:

1. There will be significant difference in perceived stress of male and female patients receiving psychological intervention and those getting treatment as usual who are suffering from cancer.
2. There will be significant difference in Quality of life of male and female patients receiving psychological intervention and those getting treatment as usual who are suffering from cancer.
3. There will be significant difference in coping skills of male and female patients receiving psychological intervention and those getting treatment as usual who are suffering from cancer.

5.0 Research Design and Methodology

5.1 The Sample

The purposive sampling technique will be used. A total of 120 patients suffering from cancer including both the genders (60 Male and 60 Female) out of which 30 male and 30 female will get the intervention and 30 male and 30 female will get treatment as usual. The sample would be collected from Oncology department of various hospitals situated in Ranchi district of Jharkhand.

TABLE NO 1 (Sample Design)

INTERVENTION	Acceptance and commitment therapy				Treatment as usual (no psychotherapeutic intervention)				Total
GENDER	Male		Female		Male		Female		120
LEVEL OF EDUCATION	Below 10^{th}	Above 10th	Below 10^{th}	Above 10th	Below 10th	Above 10th	Below 10th	Above 10th	120
TOTAL	15	15	15	15	15	15	15	15	120

Dependent Variable

a) Perceived Stress
b) Quality of life
c) Coping skill

Independent Variable

a) Acceptance and commitment therapy
b) Gender
c) Level of education

Inclusion Criteria

- The patient diagnosed with cancer
- Both Male and female
- Age Range from 30 to 50 years
- Patients who can read and comprehend either Hindi or English
- Patient under active pharmacological or radiation treatment.

Exclusion Criteria

- No other physical illness.
- No history of brain injury.
- No history of psychiatric illness
- Patients in hospice care

6.0 Sources of data and tools to be used for collection of data

Data will be taken from oncology department of various hospitals situated in Ranchi district of Jharkhand.

1. Personal Data Questionnaire and Clinical Data sheet
2. Perceived Stress Scale (PSS-10)
3. World Health Organisation Quality of Life (WHOQOL-BREF)

4. Coping Orientation to Problems Experienced Inventory (Brief-COPE)

6.1 Tools Description

1. Personal Data Questionnaire and Clinical Data Sheet

This is a semi structured Performa specially designed for this study. It contains information about socio-demographic variables like age, sex, caste, education level, residential area, socio economic status. Certain clinical variables are also included such as history of substance abuse, head injury, mental retardation, other comorbidities. (Physical or psychiatric illness).

2. Perceived Stress Scale (PSS-10)

The Percieved stress scale (PSS- 10; Cohen, Kamarch, and Mermelstein, 1983) is a widely used instrument for assessing psychological stress. It is a self-reported questionnaire created to assess how stressful one perceives particular life circumstances to be. The predictive validity of the PSS-10 rapidly declines after four to eight weeks because levels of assessed stress are altered by minor hassles, significant events, and changes in coping mechanisms (Cohen et al., 1983) The PSS has been created in three different versions. The original instrument, a 14-item scale called the PSS-14 that was created in English by Cohen et al. in 1983, was later condensed to 10 items called the PSS- 10 utilizing factor analysis and data from 2387 Americans. There was also a four-item PSS (PSS-4) introduced (Cohen & Williamson, 1988), But its psychometric validity is debatable (Lee 2012; Taylor, 2015)

The PSS is currently available in 25 languages besides English, according to Cohen's Laboratory for the Study of Stress, Immunity, and Disease (2021). The PSS-10 has better psychometric qualities than the PSS-14 and PSS-4, according to Lee (2012) analysis of all three PSS versions' psychometric attributes. All 12 of the studies that employed the PSS-10's Cronbach's alpha graded it at >.70. The PSS-10's test-retest reliability was evaluated in four investigations, and it consistently met the >.70 threshold.

The PSS questions inquire about feelings and ideas from the previous month. Respondents are asked how often they feel a certain way in each situation. Because daily inconveniences, large events, and changes in coping resources should all influence levels of assessed stress, the PSS

predictive validity is projected to dwindle rapidly after four to eight weeks. PSS scores are calculated by inverting responses to the four positively stated items (items 4,5,7, and 8) and then totaling across all scale items (e.g., 0 = 4, 1 = 3, 2 = 2,3 = 1 &4 = 0). The PSS 10-item scale questions 2, 4, 5, and 10 can be combined to create a short four-item scale).

3. World Health Organisation Quality of Life (WHOQOL-BREF)

The WHOQOL-BREF is a 26-item questionnaire with four domains: physical health (7 items) psychological health (6 items), social relationship (3 items), and environmental health (8 items), as well as QOL and general health questions. Each item on the WHOQOL-BREF is evaluated on a response scale that is specified as a five-point ordinal scale and ranges from 1 to 5. The scores are then linearly translated to a 0-100 scale.

An individual's quality of life is profiled by the WHOQOL-BREF. There are four domain scores that can be derived. The four domain ratings represent a person's assessment of their quality of life in each specific domain. Higher scores indicate a higher quality of life because domain scores are scaled in a positive direction. The domain score is calculated using the average score used in the WHOQOL-100, mean values are multiplied by 4. When an evaluation has more than 20% of its data missing, it should be rejected.

The domain's average of the remaining items is used in place of missing elements. With the exception of domain 3, where the domain should only be calculated if less than one item is missing, the domain score should not be computed when more than two items from the domain are missing. The test's reliability is determined using test-retest reliability with a significance level of 0.001. Internal reliability was over 0.70 and Cronbach's alpha reliability value for WHOQOL-BREF was 0.896.

4. Coping Orientation to Problems Experienced Inventory (Brief-COPE)

The Brief-Cope was developed as a short version of the original 60-item COPE scale (Carver et al., 1989), which was theoretically derived based on various models of coping. The Brief-COPE was initially validated on a 168 participant community sample who had been impacted by a hurricane (Carver, 1997). Two alternative ways of delineating factors have been reported in the literature. A study with heart failure patients (Eisenberg et al., 2012) indicated two major factors: (1) Avoidant Coping, and (2) Approach Coping.

Subsequent analysis by Dias et al. (2012) divided the scale into three factors; (1) Problem-focused coping, (2) Emotion-focused coping, and (3) Avoidant coping. The three-factor model is used for scoring purposes within NovoPsych.

Poulus et al. (2020) validated the scale among 316 esports athletes and found the following means and standard deviations for each subscale.

- Problem focused – 2.47 (0.63)
- Emotional focused – 2.23 (0.49)
- Avoidant coping – 1.64 (0.45

7.0 Analysis of Data

The data will be collected from various out-patient, in-patient oncology department in and around Ranchi Hospitals. Then the data will be analysed using parametric, non-parametric tests of independent T test to evaluate difference between various variable in a population. Demographic analysis and description of each variable would be performed by calculating means and analysis of variance. All the statistical operations would be carried out using SPSS-20 software. Appropriate statistics will be used to analyse the data and test the hypothesis for the study.

8.0 Significance of the Study

The study will provide the gender based comparative analyses of patients suffering from cancer in the lines of perceived stress, Quality of life, and coping skills after administration of Acceptance and Commitment Therapy as a psychological intervention strategy.

9.0 Its relevance to the present-day problem and the need of the society

In this study it would be observed the effect of diagnosis and treatment of cancer in the areas of perceived stress, quality of life, and coping skills and the changes marked after the ACT used as an active psychological intervention strategy along with pharmacological treatment. It shall also

mark the efficacy of ACT as an intervention procedure for a terminal illness like cancer in Indian population this shall hugely contribute to the Indian literature of the biomedical science.

10.0 Contributions to the existing knowledge

The finding of the present study shall contribute hugely to the mainland literature and would be proving beneficial for the professionals, clinicians, researchers and academicians especially in the biomedical field thus helping society at large. It shall help in a formulating a multidisciplinary treatment plan for patients suffering with terminal illness.

11.0 Future Work

A similar study conducted with a large sample size across various districts in India.

Chapterization

Following five chapters will be there in the proposed research.

Chapter 1. Introduction

Chapter 2. Review of Literature

Chapter 3. Methodology

Chapter 4. Analysis of Data

Chapter 5. Summary and Conclusion

Chapter 6. Reference

Chapter 7. Appendix

NOTE: This synopsis is tentative, which may be modified depending upon the availability of respondents, tools and other situations.

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